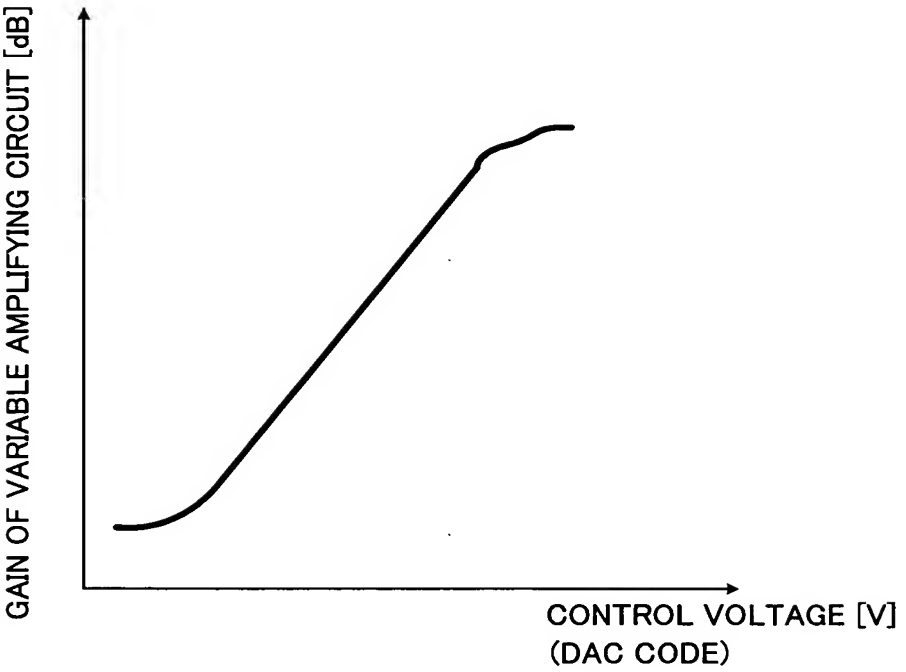
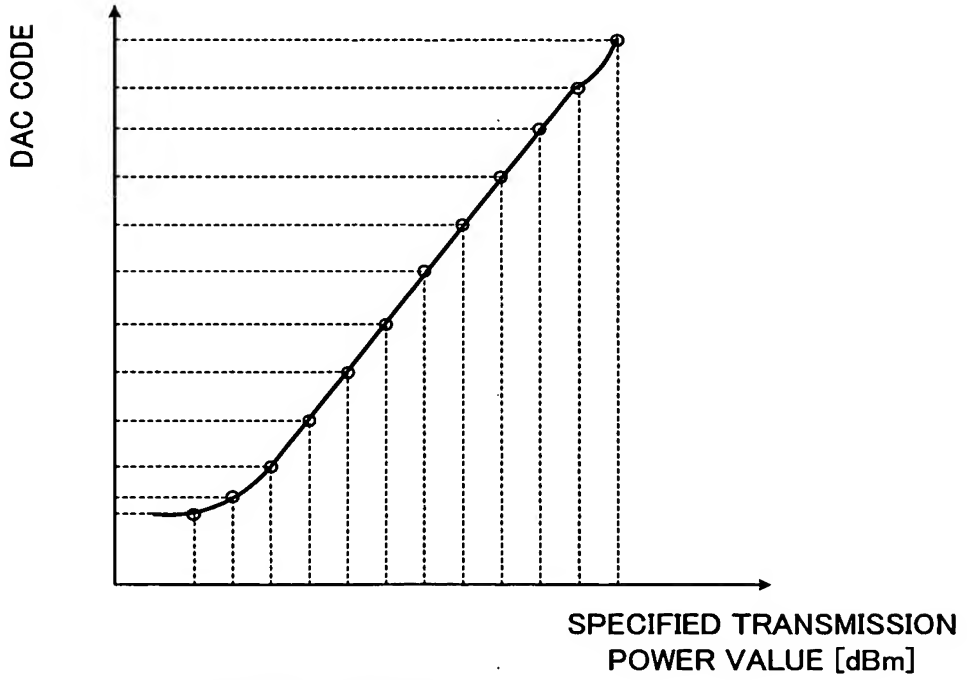


PRIOR ART

FIG.1



PRIOR ART

FIG.2

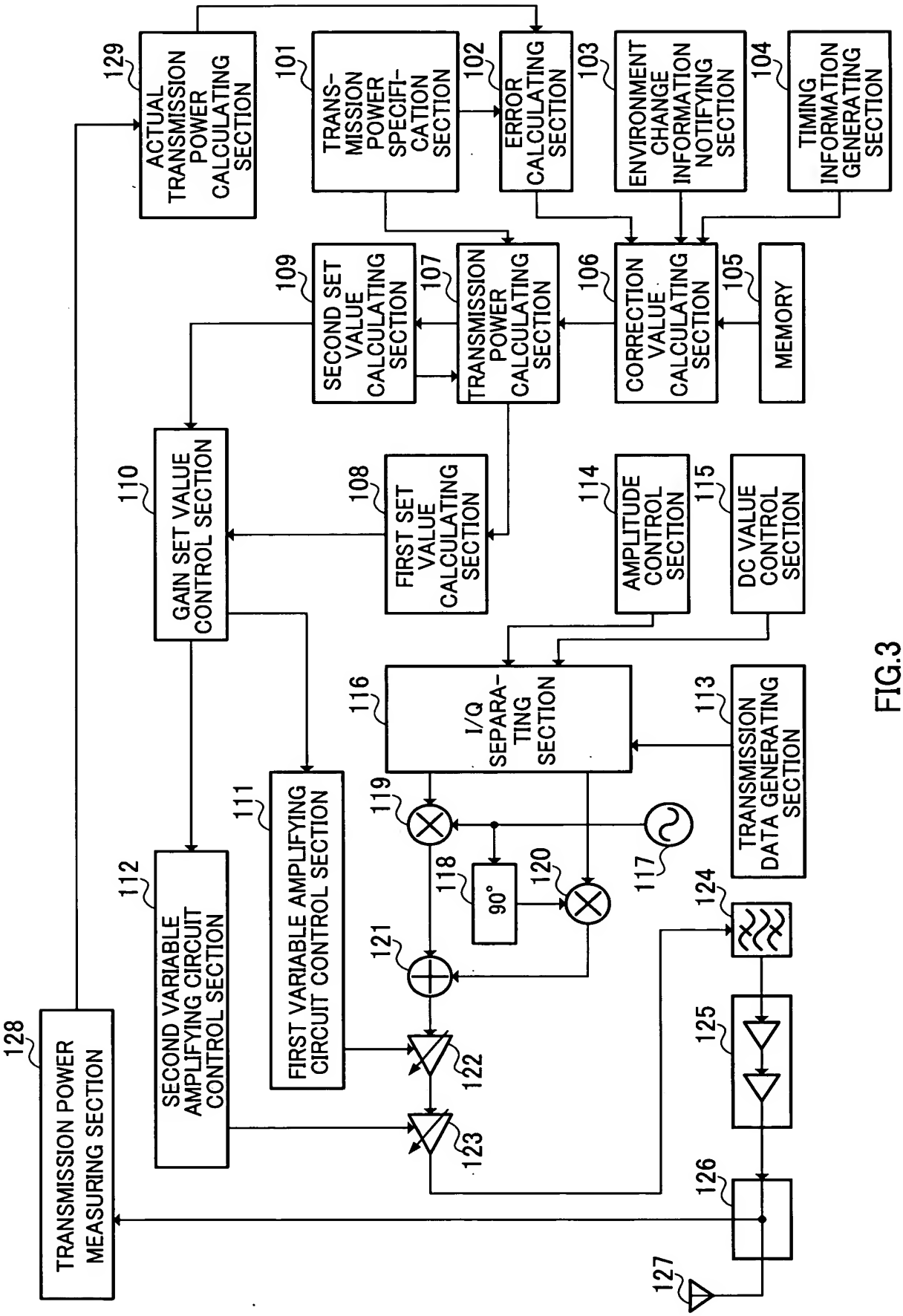

129
ACTUAL TRANSMISSION POWER CALCULATING SECTION
101
TRANS-MISSION POWER SPECIFI-CATION SECTION
102
ERROR CALCULATING SECTION
103
ENVIRONMENT CHANGE INFORMATION NOTIFYING SECTION
104
TIMING INFORMATION GENERATING SECTION
109
SECOND SET VALUE CALCULATING SECTION
107
TRANSMISSION POWER CALCULATING SECTION
106
CORRECTION VALUE CALCULATING SECTION
105
MEMORY
110
GAIN SET VALUE CONTROL SECTION
108
FIRST SET VALUE CALCULATING SECTION
114
AMPLITUDE CONTROL SECTION
115
DC VALUE CONTROL SECTION
116
I/Q SEPARA-TING SECTION
113
TRANSMISSION DATA GENERATING SECTION
111
FIRST VARIABLE AMPLIFYING CIRCUIT CONTROL SECTION
112
SECOND VARIABLE AMPLIFYING CIRCUIT CONTROL SECTION
119
118
90°
120
117
124
121
125
122
123
126
128
TRANSMISSION POWER MEASURING SECTION
127

FIG.3

GAIN SET FOR FIRST VARIABLE AMPLIFYING CIRCUIT	GAIN IN FIRST VARIABLE AMPLIFYING CIRCUIT
0[dB]	x[dB]
1[dB]	x+1[dB]
2[dB]	x+2[dB]
3[dB]	x+3[dB]
4[dB]	x+4[dB]
5[dB]	x+5[dB]
⋮	⋮
n−1[dB]	x+(n−1)[dB]
n[dB]	x+n[dB]

FIG.4

GAIN SET FOR SECOND VARIABLE AMPLIFYING CIRCUIT	GAIN IN SECOND VARIABLE AMPLIFYING CIRCUIT
−0.1*m[dB]	−0.1*m[dB]
−0.1*(m−1)[dB]	−0.1*(m−1)[dB]
⋮	⋮
−0.2[dB]	−0.2[dB]
−0.1[dB]	−0.1[dB]
0[dB]	0[dB]
0.1[dB]	0.1[dB]
0.2[dB]	0.2[dB]
⋮	⋮
0.1*(m−1)[dB]	0.1*(m−1)[dB]
0.1*m[dB]	0.1*m[dB]

FIG.5

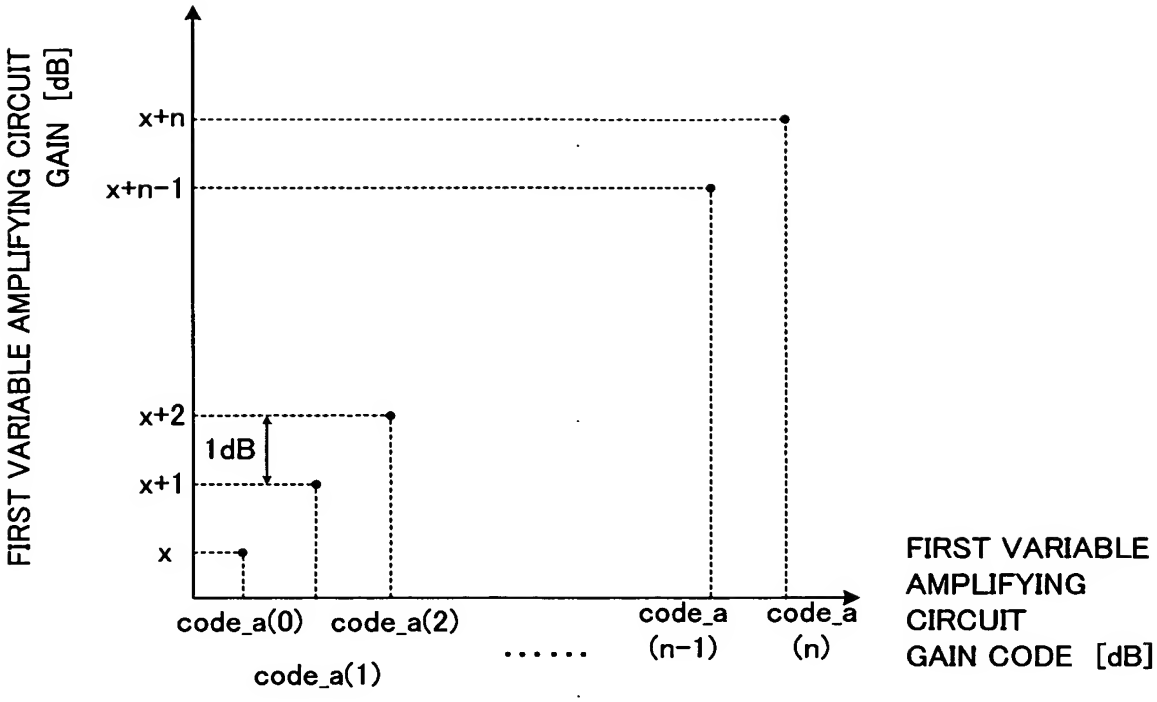

FIRST VARIABLE AMPLIFYING CIRCUIT GAIN [dB]
x+n
x+n-1
x+2
1dB
x+1
x
code_a(0)
code_a(1)
code_a(2)
code_a (n-1)
code_a (n)
FIRST VARIABLE AMPLIFYING CIRCUIT GAIN CODE [dB]

FIG.6

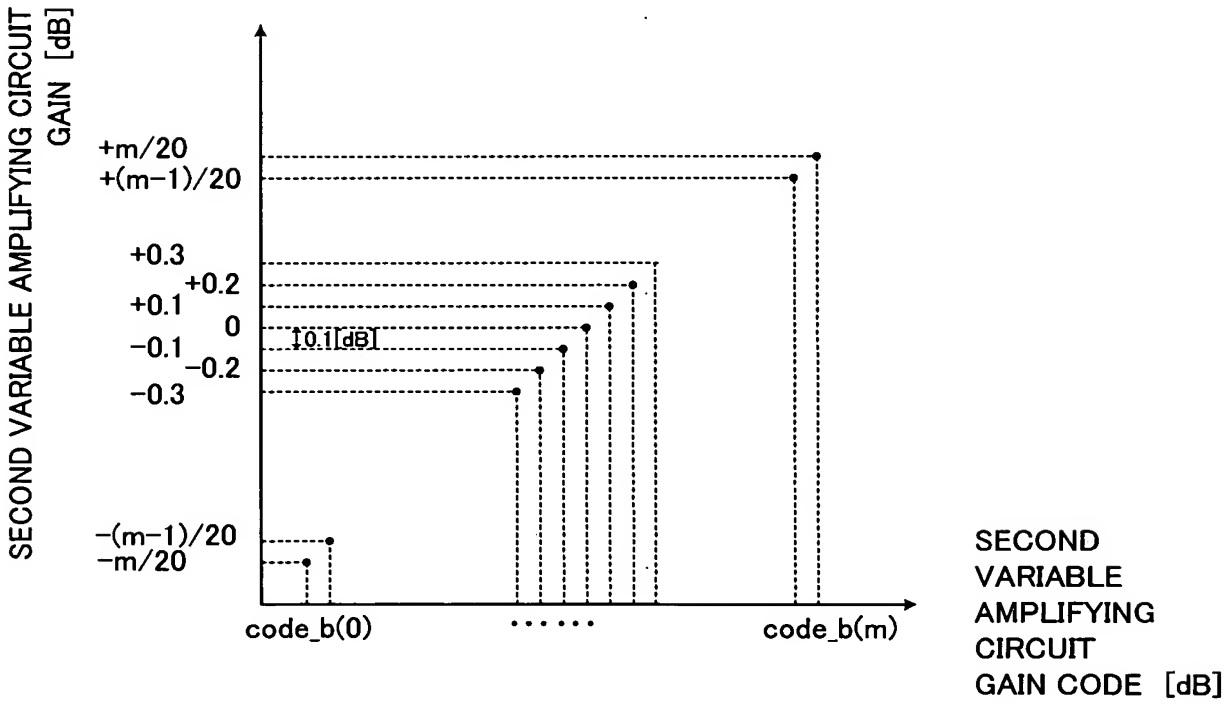

SECOND VARIABLE AMPLIFYING CIRCUIT GAIN [dB]
+m/20
+(m-1)/20
+0.3
+0.2
+0.1
0
-0.1
-0.2
-0.3
0.1[dB]
-(m-1)/20
-m/20
code_b(0)
code_b(m)
SECOND VARIABLE AMPLIFYING CIRCUIT GAIN CODE [dB]

FIG.7

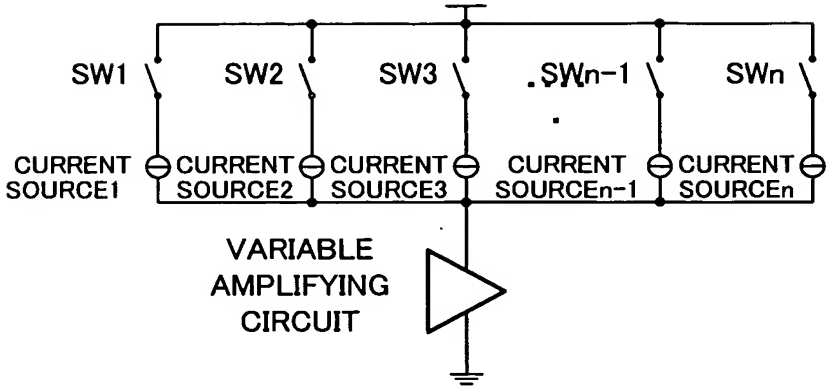

SW1
SW2
SW3
SWn-1
SWn
CURRENT SOURCE1
CURRENT SOURCE2
CURRENT SOURCE3
CURRENT SOURCEn-1
CURRENT SOURCEn
VARIABLE AMPLIFYING CIRCUIT

FIG.8

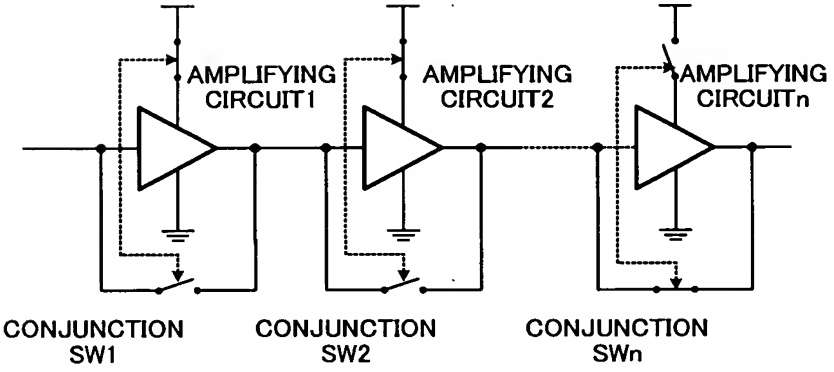

AMPLIFYING CIRCUIT1
AMPLIFYING CIRCUIT2
AMPLIFYING CIRCUITn
CONJUNCTION SW1
CONJUNCTION SW2
CONJUNCTION SWn

FIG.9

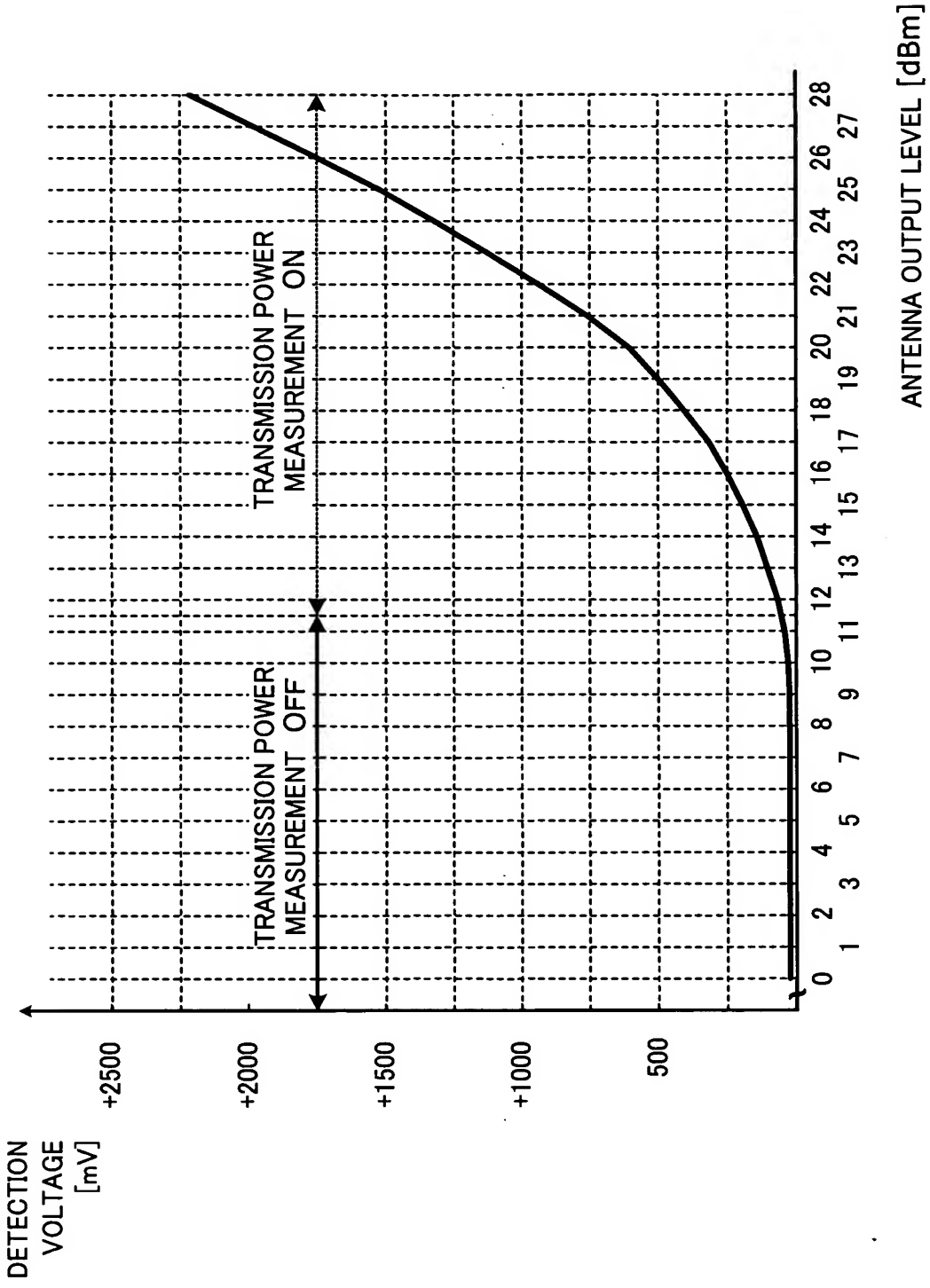

DETECTION VOLTAGE [mV]
+2500
+2000
+1500
+1000
500
TRANSMISSION POWER MEASUREMENT OFF
TRANSMISSION POWER MEASUREMENT ON
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28
ANTENNA OUTPUT LEVEL [dBm]

FIG.10

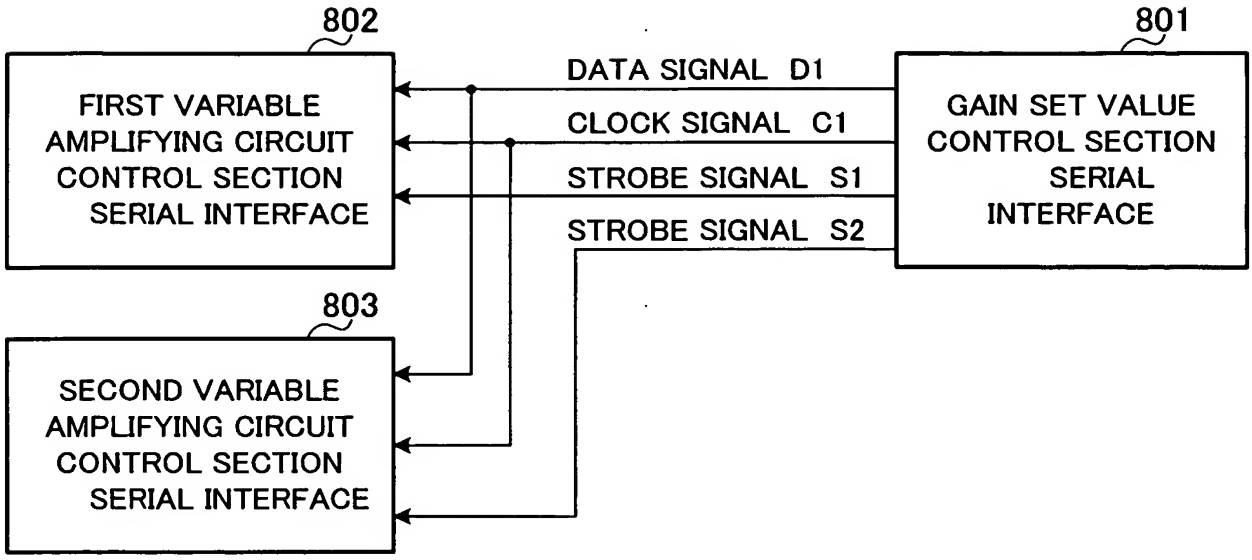


FIG.11

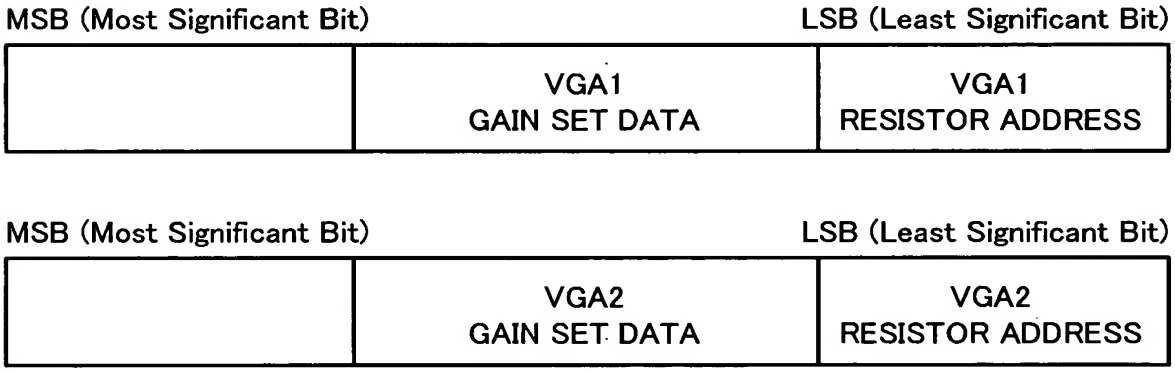


FIG.12

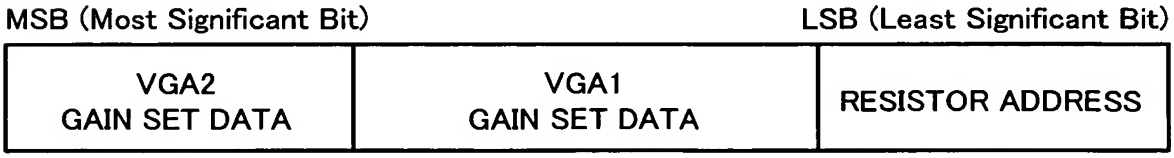


FIG.13

SPECIFIED TRANSMISSION POWER VALUE [dBm]	VARIABLE AMPLIFYING CIRCUIT SET VALUE [dB]
−56[dBm]	(p−80)+0.1*q[dB]
⋮	⋮
−3[dBm]	(p−27)+0.1*q[dB]
−2[dBm]	(p−26)+0.1*q[dB]
−1[dBm]	(p−25)+0.1*q[dB]
0[dBm]	(p−24)+0.1*q[dB]
⋮	⋮
+23[dBm]	(p−1)+0.1*q[dB]
+24[dBm]	p+0.1*q[dB]

FIG.14

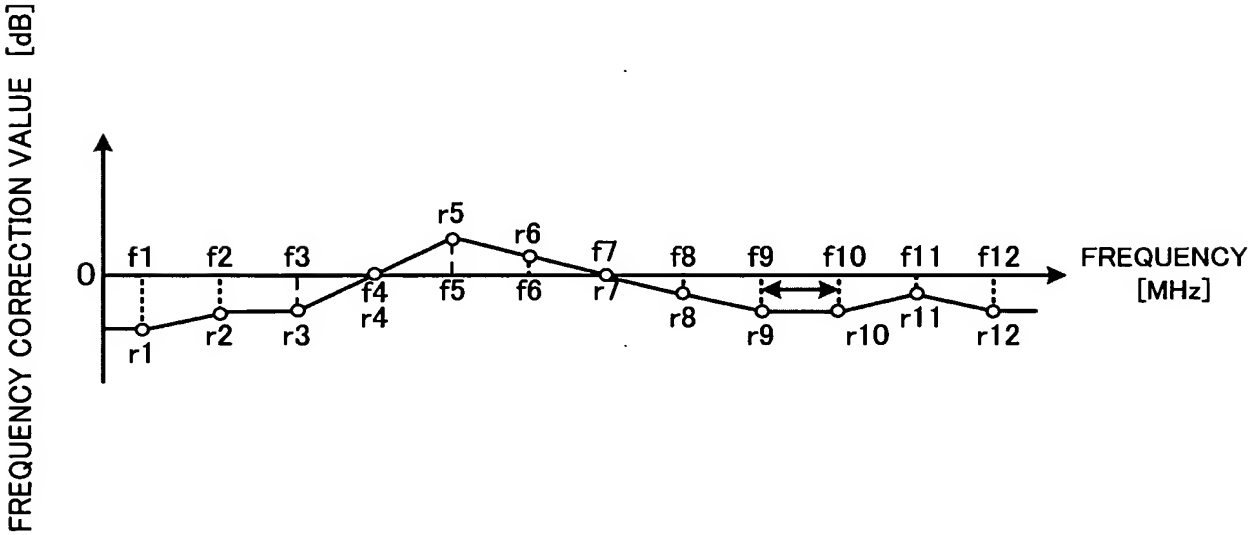


FIG.15

FREQUENCY [MHz]	FREQUENCY CORRECTION VALUE [dB]
f1	r1[dB]
f2	r2[dB]
f3	r3[dB]
f4	r4[dB]
f5	r5[dB]
⋮	⋮
f11	r11[dB]
f12	r12[dB]

FIG.16

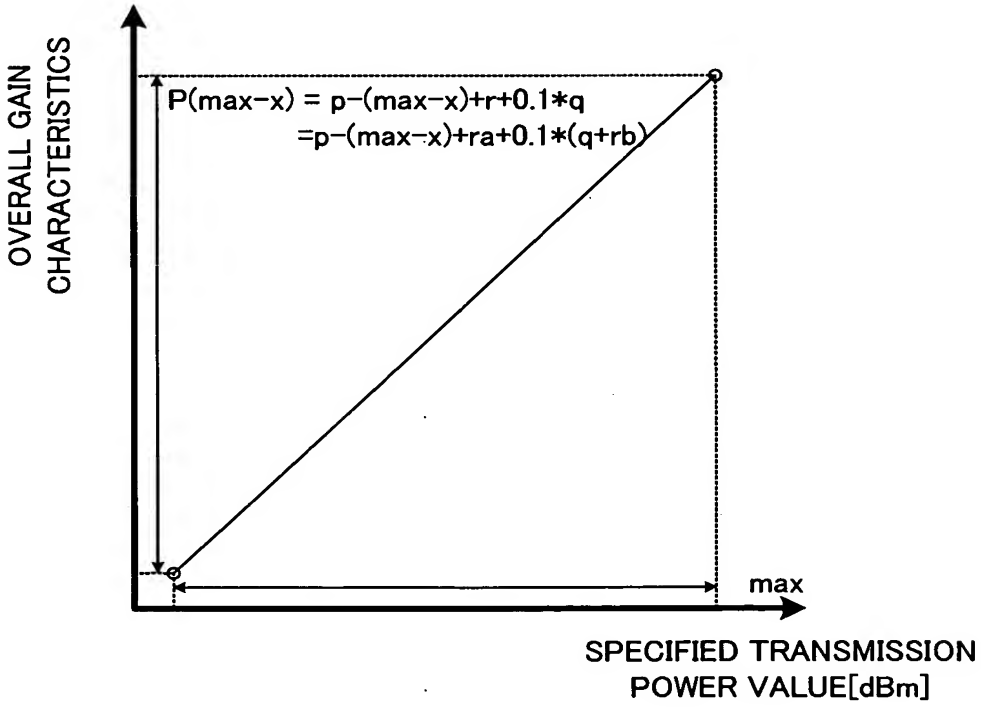
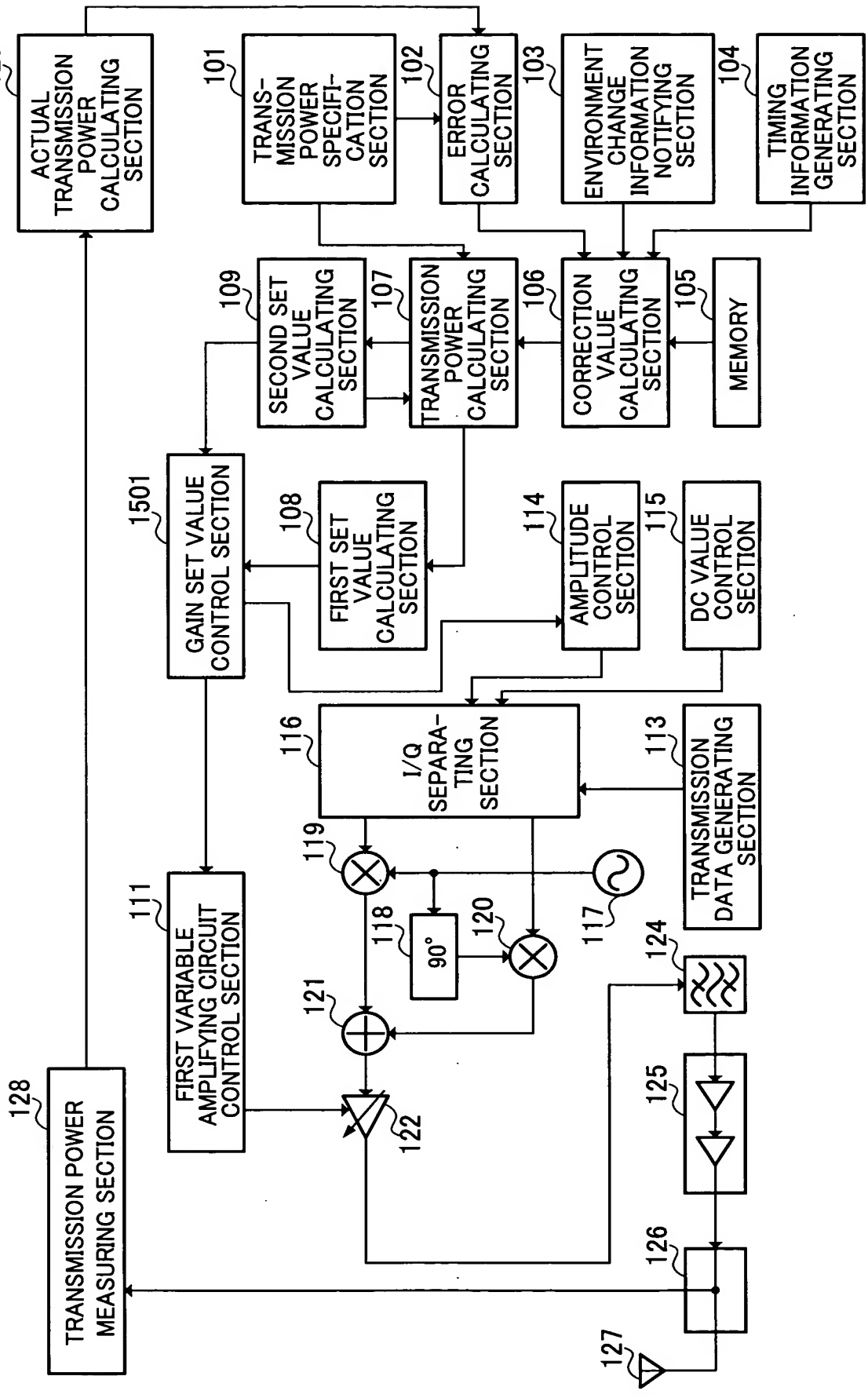


FIG.17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CORRECTION VALUE CALCULATING SECTION
105
MEMORY
1501
GAIN SET VALUE CONTROL SECTION
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FIRST SET VALUE CALCULATING SECTION
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DC VALUE CONTROL SECTION
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I/Q SEPARA-TING SECTION
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FIRST VARIABLE AMPLIFYING CIRCUIT CONTROL SECTION
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90°
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117
124
121
125
128
TRANSMISSION POWER MEASURING SECTION
122
126
127

FIG.18

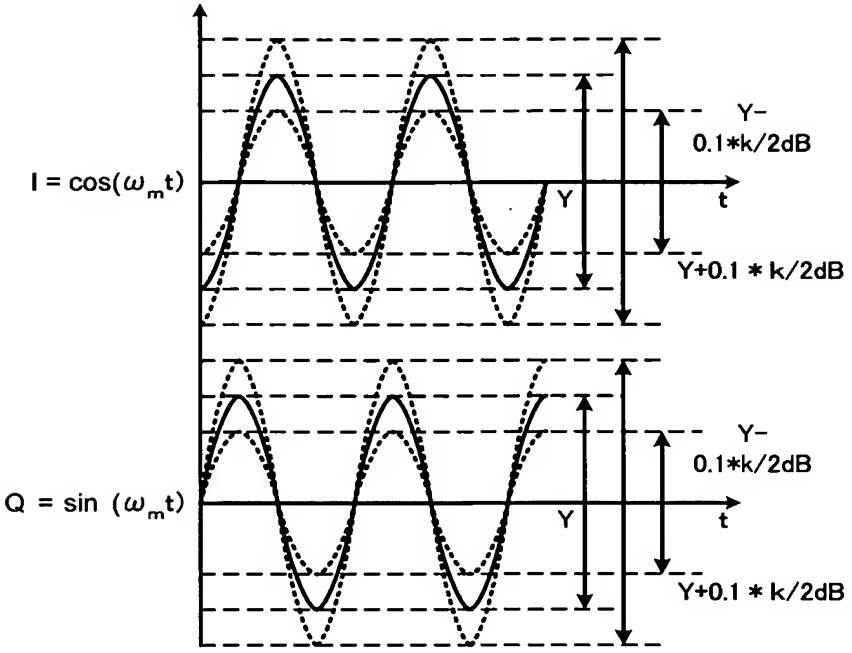
I = cos(ω_m t)
Y
t
Y-
0.1*k/2dB
Y+0.1 * k/2dB
Q = sin (ω_m t)
Y
t
Y-
0.1*k/2dB
Y+0.1 * k/2dB

FIG.19

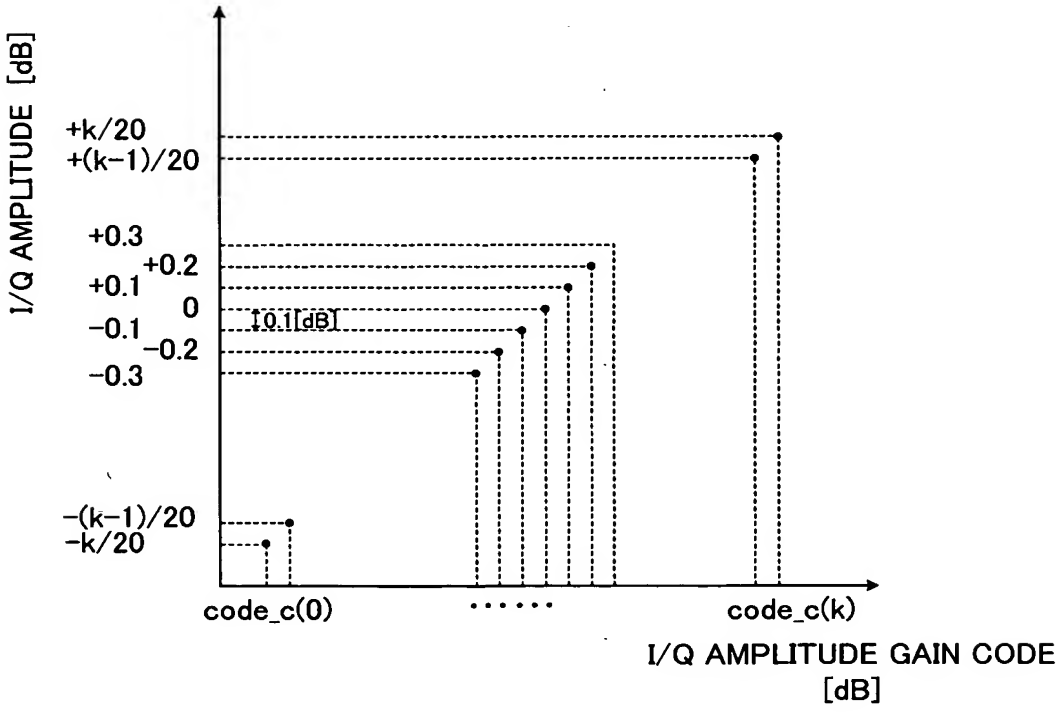
I/Q AMPLITUDE [dB]
+k/20
+(k-1)/20
+0.3
+0.2
+0.1
0
-0.1
-0.2
-0.3
0.1[dB]
-(k-1)/20
-k/20
code_c(0)
code_c(k)
I/Q AMPLITUDE GAIN CODE
[dB]

FIG.20